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Holomorphic families of isomorphisms of Möbius groups. Preliminary report.

This is an ongoing joint work with Clifford J. Earle. Let V be a simply connected complex Banach manifold with a basepoint. Let G be a subgroup of $PSL(2,\mathbb{C})$, E be a subset of the Riemann sphere (containing at least 3 points), and suppose that E is invariant under G. In this talk, we will discuss a new result on holomorphic families of isomorphisms of G. Our result crucially depends on the conformal naturality and real-analyticity of "Douady-Earle" sections (also called "barycentric sections") of some generalized Teichmüller spaces. (Received September 12, 2016)